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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,988	11/18/2003	William J. Lindsey		7607

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EXAMINER

PECHHOLD, ALEXANDRA K

ART UNIT	PAPER NUMBER
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3671

DATE MAILED: 08/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/716,988

Applicant(s)

LINDSEY, WILLIAM J.

Examiner

Alexandra K. Pechhold

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-15, 17, 18 and 21-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/18/03, 9/17/04 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date attached
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: Mapquest.com attachment

DETAILED ACTION

Claim Objections

1. Claim 17 is objected to because of the following informalities: "bride" in line 10 should be "bridge". Appropriate correction is required.

Information Disclosure Statement

2. The information disclosure statement filed May 24, 2005 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Drawings

3. Applicant corrected some of the Figures, labeling the existing embodiments as "Prior Art". But applicant forgot to label Figures 6A and 7 with the label "Prior Art" since the Specification refers to these layouts as existing. See MPEP j 608.02(g).
Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheets should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 4, 5, 11-15, 17, 18, and 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over an existing highway interchange on Route 30 between Dallas and Fort Worth, TX. (hereinafter referred to as "Route 30 Interchange").**

Regarding claim 4, the Route 30 Interchange shown in the attached mapquest.com printout discloses the features of the claimed T-interchange design, specifically comprising:

- a first road surface moving from left to right (seen in light green)
- a second road surface moving from right to left (seen in purple) an open space (shown in hash marks)
- a third road surface as recited (seen in yellow)
- a bridge located on the first road surface (seen in the printout, since the green road passes over the yellow road), so that vehicles traveling on the first road surface pass over the bridge and above the third road surface, the bridge configured so that vehicles traveling on the third road surface pass under the bridge and under the first road surface (see mapquest figure)

- an exit ramp (seen in brown) from the second road surface onto the median and connecting onto the third road surface (see mapquest figure).

The Route 30 Interchange fails to disclose the first road surface and second road surface each having at least two lanes, instead showing only one lane in each direction. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the single lanes traveling east and west to comprise at least two lanes traveling in each direction, since realistically, with the modern day heavy traffic flow, expressways are often multi-lane to be able to accommodate the increase in vehicular traffic. With respect to applicant's claims of benefits and advantages in the newly added claim limitation following "whereby" at the end of the claim, such benefits do not add additional structural limitations to the claim and therefore do not provide additional structural features that need to be addressed.

Regarding claim 5, the Route 30 Interchange discloses an on ramp (seen in blue) connected from the third road surface and passes through the median. The Interchange fails to disclose the on ramp connecting back onto the second road surface, but it travels parallel thereto. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the on ramp to connect onto the second road surface, since the Interchange shows them as traveling parallel to each other and in the same direction, so therefore connecting the roads would simply require adjoining them.

Regarding claim 11, the limitations of the claim are disclosed in the Route 30

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Interchange as discussed with respect to claims 4 and 5 above. The Route 30 Interchange fails to disclose the first road surface and second road surface each having at least two lanes, instead showing only one lane in each direction. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the single lanes traveling east and west to comprise at least two lanes traveling in each direction, since realistically, with the modern day heavy traffic flow, expressways are often multi-lane to be able to accommodate the increase in vehicular traffic. With respect to applicant's claims of benefits and advantages in the newly added claim limitation following "whereby" at the end of the claim, such benefits do not add additional structural limitations to the claim and therefore do not provide additional structural features that need to be addressed. The Interchange also fails to disclose the on ramp connecting back onto the second road surface, but it travels parallel thereto. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the on ramp to connect onto the second road surface, since the Interchange shows them as traveling parallel to each other and in the same direction, so therefore connecting the roads would simply require adjoining them.

Regarding claims 12 and 24, the Route 30 Interchange illustrates an exit ramp from the first road surface connecting onto the third road surface (shown in red).

Regarding claims 13 and 23, the Route 30 Interchange illustrates an exit ramp from the third road surface connecting onto the first road surface (shown in dark green).

Regarding claims 14 and 21, the Route 30 Interchange fails to disclose a traffic signal or stop sign at the end of the third road surface substantially where the third road

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surface meets the second road surface. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the third road surface of the Route 30 Interchange to have a traffic signal substantially where it meets the second road surface, since utilizing a signal where roads meets provides added traffic safety for directing and guiding vehicles.

Regarding claims 15 and 22, the Route 30 Interchange fails to disclose a traffic signal or stop sign at the exit ramp substantially where the exit ramp from the second road surface meets the third road surface. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the exit ramp of the Route 30 Interchange to have a traffic signal substantially where the second road surface meets the third road surface, since utilizing a signal where roads meets provides added traffic safety for directing and guiding vehicles.

Regarding claims 17 and 25, it appears from the mapquest figure that the first surface must have an "up ramp" and "down ramp" since it appears to travel over the third road surface.

Regarding claim 18, the Route 30 Interchange fails to disclose the bridge as being arched with Brownstone color and texture. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the style and material of the bridge on the Route 30 Interchange to be arched and a Brownstone in color and texture, since these are merely aesthetic features which can be modified to the taste and liking of the desired design, and do not affect the function of the structure.

6. Claims 6-10 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over an existing highway interchange on Route 30 between Dallas and Forth Worth, TX. (hereinafter referred to as "Route 30 Interchange") in view of Lee (US 6,685,386).

Regarding claim 6, the Route 30 Interchange discloses the first road, second road, open space, and third road as discussed with respect to claim 4 above, but fails to disclose the first and second road each having two lanes and fails to disclose the bridge located on the third road as recited. Lee teaches alternating whether lanes go over or under in an interchange (see Fig. 5 where lanes 11, 13 go over the perpendicular lanes, and compare with Fig. 7 where lanes 11, 13 go under the perpendicular lanes). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the bridge (as discussed with respect to claim 4 above) to be located on the third road instead of the first road (as shown in the mapquest Route 30 Interchange), so that vehicles traveling on the first road surface pass under the bridge, and under the third road surface, the bridge configured so that vehicles traveling on the third road surface pass over the bridge and over the first road surface, as taught by Lee, since moving the bridge to another road surface merely alters whether lanes go over or under, and Lee shows such interchangeability in the modification between Figs. 5 and 7. The Route 30 Interchange fails to disclose the first road surface and second road surface each having at least two lanes, instead showing only one lane in each direction. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the single lanes traveling east and west to comprise at

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least two lanes traveling in each direction, since realistically, with the modern day heavy traffic flow, expressways are often multi-lane to be able to accommodate the increase in vehicular traffic. With respect to applicant's claims of benefits and advantages in the newly added claim limitation following "whereby" at the end of the claim, such benefits do not add additional structural limitations to the claim and therefore do not provide additional structural features that need to be addressed.

Regarding claim 7, the Route 30 Interchange illustrates an exit ramp from the first road surface connecting onto the third road surface (shown in red).

Regarding claim 8, the Route 30 Interchange illustrates an exit ramp from the third road surface connecting onto the first road surface (shown in dark green).

Regarding claim 9, the Route 30 Interchange illustrates an exit ramp (seen in brown) from the second road surface onto the median and connecting onto the third road surface (see mapquest figure).

Regarding claim 10, the Route 30 Interchange discloses an on ramp (seen in blue) connected from the third road surface and passes through the median. The Interchange fails to disclose the on ramp connecting back onto the second road surface, but it travels parallel thereto. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the on ramp to connect onto the second road surface, since the Interchange shows them as traveling parallel to each other and in the same direction, so therefore connecting the roads would simply require adjoining them.

Regarding claim 26, the Route 30 Interchange fails to disclose a traffic signal or stop sign at the end of the third road surface substantially where the third road surface meets the second road surface. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the third road surface of the Route 30 Interchange to have a traffic signal substantially where it meets the second road surface, since utilizing a signal where roads meets provides added traffic safety for directing and guiding vehicles. The Route 30 Interchange also fails to disclose a traffic signal or stop sign at the exit ramp substantially where the exit ramp from the second road surface meets the third road surface. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the exit ramp of the Route 30 Interchange to have a traffic signal substantially where the second road surface meets the third road surface, since utilizing a signal where roads meets provides added traffic safety for directing and guiding vehicles.

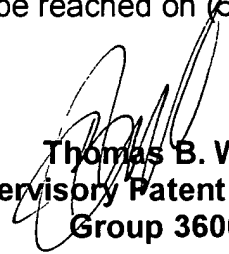
Response to Arguments

7. Applicant's arguments have been considered but are moot in view of the new grounds of rejection using the Route 30 Interchange as discussed in the rejection above. The Examiner is therefore withdrawing the previously indicated subject matter from the 12/8/04 Office Action. Accordingly, this Office Action is made non-final since the Examiner is setting forth a new grounds of rejection.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexandra Pechhold whose telephone number is (571) 272-6994. The examiner can normally be reached on Mon-Thurs. from 8:00am to 5:30pm and alternating Fridays from 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached on (571) 272-6998. The fax phone number for this Group is (703) 872-9306.



Thomas B. Will
Supervisory Patent Examiner
Group 3600

AKP
8/1/05